1955]Imshaug,—The Lichen Genus Buellia323AN ADDITIONAL SPECIES OF THE LICHEN GENUS
BUELLIA FROM THE WEST INDIESGENUS

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THE present author has recently (Imshaug 1955) published a revision of the West Indian species of Buellia. Since then he has studied the West Indian species of the closely related genus Rinodina. Only three saxicolous species of Rinodina have been reported from the West Indies and all three were described by Wainio from material collected in the Virgin Islands by F. Børgesen in 1906; R. antillarum from St. Thomas, R. boergesenii from St. Croix and R. pyxinoides from St. John. Each species was collected from only one locality, each on a different island. I have been able to examine these collections through the courtesy of Dr. M. Skytte Christiansen to whom I would like to express my sincere appreciation. All three collections represent the same species which is identical with Buellia microphylla Malme. Wainio's three names, however, antedate B. microphylla. Of the three names only the specific epithet pyxinoides has not previously been used in

Buellia.

A description of the West Indian material follows:

Buellia pyxinoides (Wain.) Imshaug, comb. nov., based on *Rinodina* pyxinoides Wain. Ann. Acad. Sci. Fenn. A. 6(7): 75. 1915. *Rinodina* boergesenii Wain. Ann. Acad. Sci. Fenn. A. 6(7): 76. 1915. *Rinodina* antillarum Wain. Ann. Acad. Sci. Fenn. A. 6(7): 77. 1915. Buellia microphylla Malme, Ark. Bot. 21A(14): 40. 1927.

TYPE COLLECTIONS: R. pyxinoides—Collected on non-calcareous rocks at Cruzbay, St. John (West Indies) by F. Børgesen on March 13, 1906. Holotype in C. R. boergesenii—Collected on non-calcareous rock at Hams Bluff, St. Croix (West Indies) by F. Børgesen on Feb. 6, 1906. Holotype in C. R. antillarum—Collected on non-calcareous rock at Magensbay Estate, 800 ft. elev., St. Thomas (West Indies) by F. Børgesen on Dec. 28, 1906. Holotype in C. B. microphylla—Collected "in rupe praerupta subumbrosa" in Paraguay (Paraguari, Santo Tomas) by G. O. Malme, no. 1508 B. Isotype seen in MO. HYPOTHALLUS composed of many black patches which tend to become continuous. THALLUS initiated as small, round, flat areoles which expand to become convex and lobate or squamulose, rarely becoming contiguous or rimose-areolate; cinereous or sometimes \pm ochraceous. APOTHECIA at first immersed but soon emergent with superficial thalloid covering

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which soon disappears, round or occasionally crenate, 0.3–0.7 mm. across; disks black, plane, naked; margins rather thick and concolorous. HYPOTHECIUM \pm colorless; exciple \pm colorless inside but with thick, dark brown margin. HYMENIUM 70–75 μ thick, colorless, not inspersed with oil drops; paraphyses enlarged at apices and fusco-capitate, forming a light brown epithecium. Spores 8 in ascus, mischoblastiomorph, fumose, (14) 15–21 (24) × (7) 8–11 (12) μ . CHEMICAL REACTIONS: Thallus section KOH—; apothecial tissues KOH—.

MATERIAL SEEN: ST. CROIX—Hams Bluff, Børgesen, 1906 (C). ST. THOMAS—Magensbay Estate, 800 ft. elev., Børgesen, 1906 (C). ST. JOHN— on maritime rocks, Cruzbay, Børgesen, 1906 (C).

Wainio recognized the similarity between *Rinodina pyxinoides* and *R. boergesenii*. The latter species was separated only by apothecia with thinner margins and non-mamillate disks. These were the same characters Wainio used to separate *Buellia gyrosa* Wain. (Syn. *B. trachyspora*) from *B. trachyspora* Wain. Wainio did not compare *Rinodina antillarum* with *R. pyxinoides* but the only significant difference I could find was in the spore size. Since the spore size seems rather variable and since my measurements do not agree with those given in the original descriptions they are recorded here:

	measurements (in KOH)	Original description
R. pyxinoides (holotype)	$17-24 \ge 10-12 \mu$	16-21 x 8-9 µ
R. boergesenii (holotype)	17-21 x 9-11 µ	13–17 x 7–9 µ
R. antillarum (holotype)	(14) 15–17 x 7– 8 μ	(10) 12–16 x 5–8 µ
B. microphylla (isotype in MO)	$18-24 \ge 10-14 \mu$	16-21 x 8-9 µ

LITERATURE CITED

Iмянаид, H. A. 1955. The lichen genus *Buellia* in the West Indies. Farlowia 4 (4): 473-512. 1955.

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